

Serial Number: 09/446, 4153CRF Processing Date: 6-3-02Edited by: M. SPENCER

Verified by: \_\_\_\_\_ (STIC sta

☐

Changed a file from non-ASCII to ASCII

☐

Changed the margins in cases where the sequence text was "wrapped" down to the next line

☐

Edited a format error in the Current Application Data section, specifically:

☐Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other \_\_\_\_\_☐

Added the mandatory heading and subheadings for "Current Application Data".

☐

Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

☐

Changed the spelling of a mandatory field (the headings or subheadings), specifically:

☐

Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:

☐

Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

☐

Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

☐

Inserted colons after headings/subheadings. Headings edited included:

☐

Deleted extra, invalid, headings used by an applicant, specifically:

☐Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as \_\_\_\_\_☒Inserted mandatory headings, specifically: <2207 SEQ ID #2☐

Corrected an obvious error in the response, specifically:

☐

Edited identifiers where upper case is used but lower case is required, or vice versa.

☐

Corrected an error in the Number of Sequences field, specifically:

☐

A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

☐Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: \_\_\_\_\_☐

Other: \_\_\_\_\_

\*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95

ENTERED

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 JUN 06 2002  
 TECH CENTER 1600/2900



1600

## RAW SEQUENCE LISTING

DATE: 06/03/2002

PATENT APPLICATION: US/09/446,415B

TIME: 10:54:04

Input Set : A:\ptoms.txt

Output Set: N:\CRF3\06032002\I446415B.raw

TECH CENTER 1600/2900

JUN 06 2002

RECEIVED

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3 <110> APPLICANT: Beamer, Lesa J.
4 Eisenberg, David
5 Carroll, Stephen F.
7 <120> TITLE OF INVENTION: BACTERICIDAL/PERMEABILITY-INCREASING PROTEIN:
8 CRYSTALLIZATION, X-RAY DIFFRACTION, THREE-DIMENSIONAL
9 STRUCTURE DETERMINATION, RATIONAL DRUG DESIGN AND
10 MOLECULAR MODELING OF RELATED PROTEINS
12 <130> FILE REFERENCE: 11034US02
14 <140> CURRENT APPLICATION NUMBER: 09/446,415B
15 <141> CURRENT FILING DATE: 2000-07-19
17 <150> PRIOR APPLICATION NUMBER: 08/879,565
18 <151> PRIOR FILING DATE: 1997-06-20
20 <160> NUMBER OF SEQ ID NOS: 12
22 <170> SOFTWARE: PatentIn Ver. 2.1
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 1813
26 <212> TYPE: DNA
27 <213> ORGANISM: Human
29 <220> FEATURE:
30 <221> NAME/KEY: CDS
31 <222> LOCATION: (31)..(1491)
33 <220> FEATURE:
34 <221> NAME/KEY: mat_peptide
35 <222> LOCATION: (124)..(1491)
37 <220> FEATURE:
38 <223> OTHER INFORMATION: "rBPI"
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41 caggccttga ggttttggca gctctggagg atg aga gag aac atg gcc agg ggc 54
42 Met Arg Glu Asn Met Ala Arg Gly
43 -30 -25
45 cct tgc aac gcg ccg aga tgg gtg tcc ctg atg gtg ctc gtc gcc ata 102
46 Pro Cys Asn Ala Pro Arg Trp Val Ser Leu Met Val Leu Val Ala Ile
47 -20 -15 -10
49 ggc acc gcc gtg aca gcg gcc gtc aac cct ggc gtc gtg gtc agg atc 150
50 Gly Thr Ala Val Thr Ala Ala Val Asn Pro Gly Val Val Val Arg Ile
51 -5 -1 1 5
53 tcc cag aag ggc ctg gac tac gcc agc cag cag ggg acg gcc gct ctg 198
54 Ser Gln Lys Gly Leu Asp Tyr Ala Ser Gln Gln Gly Thr Ala Ala Leu
55 10 15 20 25
57 cag aag gag ctg aag agg atc aag att cct gac tac tca gac agc ttt 246
58 Gln Lys Glu Leu Lys Arg Ile Lys Ile Pro Asp Tyr Ser Asp Ser Phe
59 30 35 40
61 aag atc aag cat ctt ggg aag ggg cat tat agc ttc tac agc atg gac 294

```

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Input Set : A:\ptoms.txt

Output Set: N:\CRF3\06032002\I446415B.raw

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62 Lys Ile Lys His Leu Gly Lys Gly His Tyr Ser Phe Tyr Ser Met Asp
63          45          50          55
65 atc cgt gaa ttc cag ctt ccc agt tcc cag ata agc atg gtg ccc aat 342
66 Ile Arg Glu Phe Gln Leu Pro Ser Ser Gln Ile Ser Met Val Pro Asn
67          60          65          70
69 gtg ggc ctt aag ttc tcc atc agc aac gcc aat atc aag atc agc ggg 390
70 Val Gly Leu Lys Phe Ser Ile Ser Asn Ala Asn Ile Lys Ile Ser Gly
71          75          80          85
73 aaa tgg aag gca caa aag aga ttc tta aaa atg agc ggc aat ttt gac 438
74 Lys Trp Lys Ala Gln Lys Arg Phe Leu Lys Met Ser Gly Asn Phe Asp
75 90          95          100          105
77 ctg agc ata gaa ggc atg tcc att tcg gct gat ctg aag ctg ggc agt 486
78 Leu Ser Ile Glu Gly Met Ser Ile Ser Ala Asp Leu Lys Leu Gly Ser
79          110          115          120
81 aac ccc acg tca ggc aag ccc acc atc acc tgc tcc agc tgc agc agc 534
82 Asn Pro Thr Ser Gly Lys Pro Thr Ile Thr Cys Ser Ser Cys Ser Ser
83          125          130          135
85 cac atc aac agt gtc cac gtg cac atc tca aag agc aaa gtc ggg tgg 582
86 His Ile Asn Ser Val His Val His Ile Ser Lys Ser Lys Val Gly Trp
87          140          145          150
89 ctg atc caa ctc ttc cac aaa aaa att gag tct gcg ctt cga aac aag 630
90 Leu Ile Gln Leu Phe His Lys Lys Ile Glu Ser Ala Leu Arg Asn Lys
91          155          160          165
93 atg aac agc cag gtc tgc gag aaa gtg acc aat tct gta tcc tcc aag 678
94 Met Asn Ser Gln Val Cys Glu Lys Val Thr Asn Ser Val Ser Ser Lys
95 170          175          180          185
97 ctg caa cct tat ttc cag act ctg cca gta atg acc aaa ata gat tct 726
98 Leu Gln Pro Tyr Phe Gln Thr Leu Pro Val Met Thr Lys Ile Asp Ser
99          190          195          200
101 gtg gct gga atc aac tat ggt ctg gtg gca cct cca gca acc acg gct 774
102 Val Ala Gly Ile Asn Tyr Gly Leu Val Ala Pro Pro Ala Thr Thr Ala
103          205          210          215
105 gag acc ctg gat gta cag atg aag ggg gag ttt tac agt gag aac cac 822
106 Glu Thr Leu Asp Val Gln Met Lys Gly Glu Phe Tyr Ser Glu Asn His
107          220          225          230
109 cac aat cca cct ccc ttt gct cca cca gtg atg gag ttt ccc gct gcc 870
110 His Asn Pro Pro Pro Phe Ala Pro Pro Val Met Glu Phe Pro Ala Ala
111          235          240          245
113 cat gac cgc atg gta tac ctg ggc ctc tca gac tac ttc ttc aac aca 918
114 His Asp Arg Met Val Tyr Leu Gly Leu Ser Asp Tyr Phe Phe Asn Thr
115 250          255          260          265
117 gcc ggg ctt gta tac caa gag gct ggg gtc ttg aag atg acc ctt aga 966
118 Ala Gly Leu Val Tyr Gln Glu Ala Gly Val Leu Lys Met Thr Leu Arg
119          270          275          280
121 gat gac atg att cca aag gag tcc aaa ttt cga ctg aca acc aag ttc 1014
122 Asp Asp Met Ile Pro Lys Glu Ser Lys Phe Arg Leu Thr Thr Lys Phe
123          285          290          295
125 ttt gga acc ttc cta cct gag gtg gcc aag aag ttt ccc aac atg aag 1062
126 Phe Gly Thr Phe Leu Pro Glu Val Ala Lys Lys Phe Pro Asn Met Lys

```

## RAW SEQUENCE LISTING

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TIME: 10:54:04

Input Set : A:\ptoms.txt

Output Set: N:\CRF3\06032002\I446415B.raw

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127          300          305          310
129 ata cag atc cat gtc tca gcc tcc acc ccg cca cac ctg tct gtg cag 1110
130 Ile Gln Ile His Val Ser Ala Ser Thr Pro Pro His Leu Ser Val Gln
131          315          320          325
133 ccc acc ggc ctt acc ttc tac cct gcc gtg gat gtc cag gcc ttt gcc 1158
134 Pro Thr Gly Leu Thr Phe Tyr Pro Ala Val Asp Val Gln Ala Phe Ala
135 330          335          340          345
137 gtc ctc ccc aac tcc tcc ctg gct tcc ctc ttc ctg att ggc atg cac 1206
138 Val Leu Pro Asn Ser Ser Leu Ala Ser Leu Phe Leu Ile Gly Met His
139          350          355          360
141 aca act ggt tcc atg gag gtc agc gcc gag tcc aac agg ctt gtt gga 1254
142 Thr Thr Gly Ser Met Glu Val Ser Ala Glu Ser Asn Arg Leu Val Gly
143          365          370          375
145 gag ctc aag ctg gat agg ctg ctc ctg gaa ctg aag cac tca aat att 1302
146 Glu Leu Lys Leu Asp Arg Leu Leu Leu Glu Leu Lys His Ser Asn Ile
147          380          385          390
149 ggc ccc ttc ccg gtt gaa ttg ctg cag gat atc atg aac tac att gta 1350
150 Gly Pro Phe Pro Val Glu Leu Leu Gln Asp Ile Met Asn Tyr Ile Val
151          395          400          405
153 ccc att ctt gtg ctg ccc agg gtt aac gag aaa cta cag aaa ggc ttc 1398
154 Pro Ile Leu Val Leu Pro Arg Val Asn Glu Lys Leu Gln Lys Gly Phe
155 410          415          420          425
157 cct ctc ccg acg ccg gcc aga gtc cag ctc tac aac gta gtg ctt cag 1446
158 Pro Leu Pro Thr Pro Ala Arg Val Gln Leu Tyr Asn Val Val Leu Gln
159          430          435          440
161 cct cac cag aac ttc ctg ctg ttc ggt gca gac gtt gtc tat aaa 1491
162 Pro His Gln Asn Phe Leu Leu Phe Gly Ala Asp Val Val Tyr Lys
163          445          450          455
165 tgaaggcacc aggggtgccg ggggctgtca gccgcacctg ttctctgatgg gctgtggggc 1551
167 accggtgcc tttccccagg gaatcctctc cagatcttaa ccaagagccc cttgcaaaact 1611
169 tcttcgactc agattcagaa atgatctaaa caccaggaaa cattattcat tggaaaagtg 1671
171 catggtgtgt attttaggga ttatgagctt ctttcaaggg ctaaggctgc agagatatatt 1731
173 cctccaggaa togtgtttca attgtaacca agaaatttcc atttgtgctt catgaaaaaa 1791
175 aacttctggt ttttttcatg tg 1813
178 <210> SEQ ID NO: 2
179 <211> LENGTH: 487
180 <212> TYPE: PRT
181 <213> ORGANISM: Human
W--> 182 <220> FEATURE:
183 <223> OTHER INFORMATION: "rBPI"
185 <400> SEQUENCE: 2
186 Met Arg Glu Asn Met Ala Arg Gly Pro Cys Asn Ala Pro Arg Trp Val
187 -30 -25 -20
189 Ser Leu Met Val Leu Val Ala Ile Gly Thr Ala Val Thr Ala Ala Val
190 -15 -10 -5 -1 1
192 Asn Pro Gly Val Val Val Arg Ile Ser Gln Lys Gly Leu Asp Tyr Ala
193 5 10 15
195 Ser Gln Gln Gly Thr Ala Ala Leu Gln Lys Glu Leu Lys Arg Ile Lys
196 20 25 30

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## RAW SEQUENCE LISTING

DATE: 06/03/2002

PATENT APPLICATION: US/09/446,415B

TIME: 10:54:04

Input Set : A:\ptoms.txt

Output Set: N:\CRF3\06032002\I446415B.raw

```

198 Ile Pro Asp Tyr Ser Asp Ser Phe Lys Ile Lys His Leu Gly Lys Gly
199      35      40      45
201 His Tyr Ser Phe Tyr Ser Met Asp Ile Arg Glu Phe Gln Leu Pro Ser
202 50      55      60      65
204 Ser Gln Ile Ser Met Val Pro Asn Val Gly Leu Lys Phe Ser Ile Ser
205      70      75      80
207 Asn Ala Asn Ile Lys Ile Ser Gly Lys Trp Lys Ala Gln Lys Arg Phe
208      85      90      95
210 Leu Lys Met Ser Gly Asn Phe Asp Leu Ser Ile Glu Gly Met Ser Ile
211      100      105      110
213 Ser Ala Asp Leu Lys Leu Gly Ser Asn Pro Thr Ser Gly Lys Pro Thr
214      115      120      125
216 Ile Thr Cys Ser Ser Cys Ser Ser His Ile Asn Ser Val His Val His
217 130      135      140      145
219 Ile Ser Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Lys
220      150      155      160
222 Ile Glu Ser Ala Leu Arg Asn Lys Met Asn Ser Gln Val Cys Glu Lys
223      165      170      175
225 Val Thr Asn Ser Val Ser Ser Lys Leu Gln Pro Tyr Phe Gln Thr Leu
226      180      185      190
228 Pro Val Met Thr Lys Ile Asp Ser Val Ala Gly Ile Asn Tyr Gly Leu
229      195      200      205
231 Val Ala Pro Pro Ala Thr Thr Ala Glu Thr Leu Asp Val Gln Met Lys
232 210      215      220      225
234 Gly Glu Phe Tyr Ser Glu Asn His His Asn Pro Pro Pro Phe Ala Pro
235      230      235      240
237 Pro Val Met Glu Phe Pro Ala Ala His Asp Arg Met Val Tyr Leu Gly
238      245      250      255
240 Leu Ser Asp Tyr Phe Phe Asn Thr Ala Gly Leu Val Tyr Gln Glu Ala
241      260      265      270
243 Gly Val Leu Lys Met Thr Leu Arg Asp Asp Met Ile Pro Lys Glu Ser
244      275      280      285
246 Lys Phe Arg Leu Thr Thr Lys Phe Phe Gly Thr Phe Leu Pro Glu Val
247 290      295      300      305
249 Ala Lys Lys Phe Pro Asn Met Lys Ile Gln Ile His Val Ser Ala Ser
250      310      315      320
252 Thr Pro Pro His Leu Ser Val Gln Pro Thr Gly Leu Thr Phe Tyr Pro
253      325      330      335
255 Ala Val Asp Val Gln Ala Phe Ala Val Leu Pro Asn Ser Ser Leu Ala
256      340      345      350
258 Ser Leu Phe Leu Ile Gly Met His Thr Thr Gly Ser Met Glu Val Ser
259      355      360      365
261 Ala Glu Ser Asn Arg Leu Val Gly Glu Leu Lys Leu Asp Arg Leu Leu
262 370      375      380      385
264 Leu Glu Leu Lys His Ser Asn Ile Gly Pro Phe Pro Val Glu Leu Leu
265      390      395      400
267 Gln Asp Ile Met Asn Tyr Ile Val Pro Ile Leu Val Leu Pro Arg Val
268      405      410      415
270 Asn Glu Lys Leu Gln Lys Gly Phe Pro Leu Pro Thr Pro Ala Arg Val

```

## RAW SEQUENCE LISTING

DATE: 06/03/2002

PATENT APPLICATION: US/09/446,415B

TIME: 10:54:04

Input Set : A:\ptoms.txt

Output Set: N:\CRF3\06032002\I446415B.raw

```

271          420          425          430
273 Gln Leu Tyr Asn Val Val Leu Gln Pro His Gln Asn Phe Leu Leu Phe
274          435          440          445
276 Gly Ala Asp Val Val Tyr Lys
277 450          455
281 <210> SEQ ID NO: 3
282 <211> LENGTH: 456
283 <212> TYPE: PRT
284 <213> ORGANISM: Human
286 <220> FEATURE:
287 <223> OTHER INFORMATION: bactericidal/permeability-increasing protein (BPI)
288 (Figure 5)
290 <400> SEQUENCE: 3
291 Val Asn Pro Gly Val Val Val Arg Ile Ser Gln Lys Gly Leu Asp Tyr
292 1          5          10          15
294 Ala Ser Gln Gln Gly Thr Ala Ala Leu Gln Lys Glu Leu Lys Arg Ile
295          20          25          30
297 Lys Ile Pro Asp Tyr Ser Asp Ser Phe Lys Ile Lys His Leu Gly Lys
298          35          40          45
300 Gly His Tyr Ser Phe Tyr Ser Met Asp Ile Arg Glu Phe Gln Leu Pro
301          50          55          60
303 Ser Ser Gln Ile Ser Met Val Pro Asn Val Gly Leu Lys Phe Ser Ile
304 65          70          75          80
306 Ser Asn Ala Asn Ile Lys Ile Ser Gly Lys Trp Lys Ala Gln Lys Arg
307          85          90          95
309 Phe Leu Lys Met Ser Gly Asn Phe Asp Leu Ser Ile Glu Gly Met Ser
310          100         105         110
312 Ile Ser Ala Asp Leu Lys Leu Gly Ser Asn Pro Thr Ser Gly Lys Pro
313          115         120         125
315 Thr Ile Thr Cys Ser Ser Cys Ser Ser His Ile Asn Ser Val His Val
316          130         135         140
318 His Ile Ser Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys
319 145          150         155         160
321 Lys Ile Glu Ser Ala Leu Arg Asn Lys Met Asn Ser Gln Val Cys Glu
322          165         170         175
324 Lys Val Thr Asn Ser Val Ser Ser Glu Leu Gln Pro Tyr Phe Gln Thr
325          180         185         190
327 Leu Pro Val Met Thr Lys Ile Asp Ser Val Ala Gly Ile Asn Tyr Gly
328          195         200         205
330 Leu Val Ala Pro Pro Ala Thr Thr Ala Glu Thr Leu Asp Val Gln Met
331          210         215         220
333 Lys Gly Glu Phe Tyr Ser Glu Asn His His Asn Pro Pro Pro Phe Ala
334 225          230         235         240
336 Pro Pro Val Met Glu Phe Pro Ala Ala His Asp Arg Met Val Tyr Leu
337          245         250         255
339 Gly Leu Ser Asp Tyr Phe Phe Asn Thr Ala Gly Leu Val Tyr Gln Glu
340          260         265         270
342 Ala Gly Val Leu Lys Met Thr Leu Arg Asp Asp Met Ile Pro Lys Glu
343          275         280         285

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VERIFICATION SUMMARY

DATE: 06/03/2002

PATENT APPLICATION: US/09/446,415B

TIME: 10:54:05

Input Set : A:\ptoms.txt

Output Set: N:\CRF3\06032002\I446415B.raw

L:182 M:283 W: Missing Blank Line separator, <220> field identifier

Does Not Comply  
Corrected Diskette Needed



1600

## RAW SEQUENCE LISTING

DATE: 05/23/2002

PATENT APPLICATION: US/09/446,415B

TIME: 17:01:31

Input Set : A:\11034US02.SEQ.txt

Output Set: N:\CRF3\05232002\I446415B.raw

3 <110> APPLICANT: Beamer, Lesa J.  
4 Eisenberg, David  
5 Carroll, Stephen F.  
7 <120> TITLE OF INVENTION: BACTERICIDAL/PERMEABILITY-INCREASING PROTEIN:  
8 CRYSTALLIZATION, X-RAY DIFFRACTION, THREE-DIMENSIONAL  
9 STRUCTURE DETERMINATION, RATIONAL DRUG DESIGN AND  
10 MOLECULAR MODELING OF RELATED PROTEINS  
12 <130> FILE REFERENCE: 11034US02  
14 <140> CURRENT APPLICATION NUMBER: 09/446,415B  
15 <141> CURRENT FILING DATE: 2000-07-19  
17 <150> PRIOR APPLICATION NUMBER: 08/879,565  
18 <151> PRIOR FILING DATE: 1997-06-20  
20 <160> NUMBER OF SEQ ID NOS: 12  
22 <170> SOFTWARE: PatentIn Ver. 2.1

## ERRORED SEQUENCES

178 <210> SEQ ID NO: 2  
179 <211> LENGTH: 487  
180 <212> TYPE: PRT  
181 <213> ORGANISM: Human  
182 <223> OTHER INFORMATION: "rBPI"

E--&gt; 184 &lt;400&gt; SEQUENCE: 2

185 Met Arg Glu Asn Met Ala Arg Gly Pro Cys Asn Ala Pro Arg Trp Val  
186 -30 -25 -20  
188 Ser Leu Met Val Leu Val Ala Ile Gly Thr Ala Val Thr Ala Ala Val  
189 -15 -10 -5 -1 1  
191 Asn Pro Gly Val Val Val Arg Ile Ser Gln Lys Gly Leu Asp Tyr Ala  
192 5 10 15  
194 Ser Gln Gln Gly Thr Ala Ala Leu Gln Lys Glu Leu Lys Arg Ile Lys  
195 20 25 30  
197 Ile Pro Asp Tyr Ser Asp Ser Phe Lys Ile Lys His Leu Gly Lys Gly  
198 35 40 45  
200 His Tyr Ser Phe Tyr Ser Met Asp Ile Arg Glu Phe Gln Leu Pro Ser  
201 50 55 60 65  
203 Ser Gln Ile Ser Met Val Pro Asn Val Gly Leu Lys Phe Ser Ile Ser  
204 70 75 80  
206 Asn Ala Asn Ile Lys Ile Ser Gly Lys Trp Lys Ala Gln Lys Arg Phe  
207 85 90 95  
209 Leu Lys Met Ser Gly Asn Phe Asp Leu Ser Ile Glu Gly Met Ser Ile  
210 100 105 110  
212 Ser Ala Asp Leu Lys Leu Gly Ser Asn Pro Thr Ser Gly Lys Pro Thr

*mandatory numeric ident. fix, <220>  
missing.*



## RAW SEQUENCE LISTING

DATE: 05/23/2002

PATENT APPLICATION: US/09/446,415B

TIME: 17:01:31

Input Set : A:\11034US02.SEQ.txt

Output Set: N:\CRF3\05232002\I446415B.raw

```

213      115      120      125
215 Ile Thr Cys Ser Ser Cys Ser Ser His Ile Asn Ser Val His Val His
216 130      135      140      145
218 Ile Ser Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Lys
219      150      155      160
221 Ile Glu Ser Ala Leu Arg Asn Lys Met Asn Ser Gln Val Cys Glu Lys
222      165      170      175
224 Val Thr Asn Ser Val Ser Ser Lys Leu Gln Pro Tyr Phe Gln Thr Leu
225      180      185      190
227 Pro Val Met Thr Lys Ile Asp Ser Val Ala Gly Ile Asn Tyr Gly Leu
228      195      200      205
230 Val Ala Pro Pro Ala Thr Thr Ala Glu Thr Leu Asp Val Gln Met Lys
231 210      215      220      225
233 Gly Glu Phe Tyr Ser Glu Asn His His Asn Pro Pro Pro Phe Ala Pro
234      230      235      240
236 Pro Val Met Glu Phe Pro Ala Ala His Asp Arg Met Val Tyr Leu Gly
237      245      250      255
239 Leu Ser Asp Tyr Phe Phe Asn Thr Ala Gly Leu Val Tyr Gln Glu Ala
240      260      265      270
242 Gly Val Leu Lys Met Thr Leu Arg Asp Asp Met Ile Pro Lys Glu Ser
243      275      280      285
245 Lys Phe Arg Leu Thr Thr Lys Phe Phe Gly Thr Phe Leu Pro Glu Val
246 290      295      300      305
248 Ala Lys Lys Phe Pro Asn Met Lys Ile Gln Ile His Val Ser Ala Ser
249      310      315      320
251 Thr Pro Pro His Leu Ser Val Gln Pro Thr Gly Leu Thr Phe Tyr Pro
252      325      330      335
254 Ala Val Asp Val Gln Ala Phe Ala Val Leu Pro Asn Ser Ser Leu Ala
255      340      345      350
257 Ser Leu Phe Leu Ile Gly Met His Thr Thr Gly Ser Met Glu Val Ser
258      355      360      365
260 Ala Glu Ser Asn Arg Leu Val Gly Glu Leu Lys Leu Asp Arg Leu Leu
261 370      375      380      385
263 Leu Glu Leu Lys His Ser Asn Ile Gly Pro Phe Pro Val Glu Leu Leu
264      390      395      400
266 Gln Asp Ile Met Asn Tyr Ile Val Pro Ile Leu Val Leu Pro Arg Val
267      405      410      415
269 Asn Glu Lys Leu Gln Lys Gly Phe Pro Leu Pro Thr Pro Ala Arg Val
270      420      425      430
272 Gln Leu Tyr Asn Val Val Leu Gln Pro His Gln Asn Phe Leu Leu Phe
273      435      440      445
275 Gly Ala Asp Val Val Tyr Lys
276 450      455

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VERIFICATION SUMMARY

DATE: 05/23/2002

PATENT APPLICATION: US/09/446,415B

TIME: 17:01:32

Input Set : A:\11034US02.SEQ.txt

Output Set: N:\CRF3\05232002\I446415B.raw

L:184 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:2